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## **Claims**

- 1. Mobile electronic device, having a radio receiver (28), an amplifier (24) and an audio connector (20) for connecting to a headphone (2), wherein said audio connector (2) comprises at least one first contact and at least one second contact, wherein said first contact is connected to ground and to said radio receiver (28), and said second contact is connected to said amplifier (24), characterized by a band-pass filter component (26) interconnected between said first contact and said radio receiver (28).
- 2. Mobile electronic device according to claim 1, wherein said band-pass filter component (26) comprises a capacitor (42) connected between said first contact and ground.
  - 3. Mobile electronic device according to claim 1, wherein said band-pass filter component (26) is an oscillating circuit composed of an inductor (22) and a capacitor (42).
  - 4. Mobile electronic device according to claim 3, wherein the transmitted frequencies of the band-pass filter component (26) are within the radio frequency range, and the suppressed frequencies comprises the mobile phone frequencies and audio frequencies.
- 5. Mobile electronic device according to anyone of the preceding claims, wherein said capacitor (42) has a capacity between 10 pF and 100 pF.
  - 6. Mobile electronic device according to anyone of the preceding claims, further comprising a mobile telephone.
  - 7. Mobile electronic device according to anyone of the preceding claims, wherein said radio receiver (28) further comprises a television receiver.
- 8. Mobile electronic device according to anyone of the preceding claims, further comprising a media player (30).
  - 9. Mobile electronic device according to claim 8, wherein said media player (30) includes a media recorder.
- 35 10. Mobile electronic device according to anyone of the preceding claims, wherein said audio connector comprises at least one third contact connected to a component of said electronic device.

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11. Mobile electronic device according to claims 6 and 10, wherein said third contact is connected to a mobile phone component of said mobile electronic device, to provide a headset to a mobile phone within said mobile electronic device.

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12. Mobile electronic device according to claim 10 or 11, wherein said third contact is connected to control components of said mobile electronic device, to provide a remote control functionality to the mobile electronic device.

13. Mobile electronic device according to anyone of the preceding claims, further comprising a DC blocking capacitor (40) interconnected between said first contact and said radio receiver (28).